

9	18	27	36	45	54
5' NNT CAA AGC CAG CTG AAG GAA AGA GGA AGT GCT AGA GAG AGC CCC CTT CAG TGT					
63	72	81	90	99	108
GCT TCT GAC TTT TAC GGA CTT GGC TTG TTA GAA GGC TGA AAG ATG ATG GCA GGA				M M A G	
117	126	135	144	153	162
ATG AAA ATC CAG CTT GTA TGC ATG CTA CTC CTG GCT TTC AGC TCC TGG AGT CTG					
M K I Q L V C M L L L A F S S W S L					
171	180	189	198	207	216
TGC TCA GAT TCA GAA GAG GAA ATG AAA GCA TTA GAA GCA GAT TTC TTG ACC AAT					
C S D S E E E M K A A L E A D F L T N					
225	234	243	252	261	270
ATG CAT ACA TCA AAG ATT AGT AAA GCA CAT GTT CCC TCT TGG AAG ATG ACT CTG					
M H T S S K I S S K A H V P S W K M T L					
279	288	297	306	315	324
CTA AAT GTT TGC AGT CTT GTA AAT AAT TTG AAC AGC CCA GCT GAG GAA ACA GGA					
L N V C S L L V N N N L N S P A E E T G					
333	342	351	360	369	378
GAA GTT CAT GAA GAG GAG CTT GTT GCA AGA AGG AAA CTT CCT ACT GCT TTA GAT					
E V H E E E L V A R R K L P T A L D					

FIGURE 1A

387	396	405	414	423	432
GGC TTT AGC TTG GAA GCA ATG TTG ACA ATA TAC CAG CTC CAC AAA ATC TGT CAC					
G F S L E A M L T I Y Q L H K I C H					
441	450	459	468	477	486
AGC AGG GCT TTT CAA CAC TGG GAG TTA ATC CAG GAA GAT ATT CTT GAT ACT GGA					
S R A F Q H W E L I Q Q E D I L D T G					
495	504	513	522	531	540
AAT GAC AAA AAT GGA AAG GAA GAA GTC ATA AAG AGA AAA ATT CCT TAT ATT CTG					
N D K N G K E E V I K R K I P Y I L					
549	558	567	576	585	594
AAA CGG CAG CTG TAT GAG AAT AAA CCC AGA AGA CCC TAC ATA CTC AAA AGA GAT					
K R Q L Y E N K P R R P Y I L K R D					
603	612	621	630	639	648
TCT TAC TAT TAC TGA GAG AAT AAA TCA TTT ATT TAC ATG TGA TTG TGA TTC ATC					
S Y Y Y					
657	666	675	684	693	702
ATC CCT TAA TTA AAT ATC AAA TTA TAT TTG TGT GAA AAT GTG ACA AAC ACA CTT					
711	720	729	738	747	756
ATC TGT CTC TTC TAC AAT TGT GGT TTA TTG AAT GTG ATT TTT CTG CAC TAA TAT					

FIGURE 1B

765	774	783	792	801	810
AAA TTA GAC TAA GTG TTT TCA AAT AAA TCT AAA TCT TCA GCA TGA TGT GTT GTG					
819	828	837	846	855	864
TAT AAT TGG AGT AGA TAT TAA TTA AGT CAC CTG TAT AAT GTT TTG TAA TTT TGC					
873	882	891	900	909	918
AAA ACA TAT CTT GAG TTG TTT AAA CAG TCA AAA TGT TTG ATA TTT TAT ACC AGC					
927	936	945	954	963	972
TTA TGA GCT CAA AGT ACT ACA GCA AAG CCT AGC CTG CAT ATC ATT CAC CCA AAA					
981	990	999	1008	1017	1026
CAA AGT AAT AGC GCC TCT TTT ATT ATT TTG ACT GAA TGT TTT ATG GAA TTG AAA					
1035	1044	1053	1062	1071	1080
GAA ACA TAC GTT CTT TTC AAG ACT TCC TCA TGA ATC TCT CAA TTA TAG GAA AAG					
1089	1098	1107	1116	1125	1134
TTA TTG TGA TAA AAT AGG AAC AGC TGA AAG ATT GAT TAA TGA ACT ATT GTT ATT					
1143	1152	1161	1170	1179	1188
ACT TCC TAT TTT AAT GAA TGA CAT TGA ACT GGA TTT TTT GAC CTG TTA ATG GAC					
1197	1206	1215	1224	1233	1242
TTG GTA GCT ATT AGA AGG ACA CTT GAC CTC CAA TAG AAA AAT AAA GAA ATA					

FIGURE 1C

1251 1260 1269 1278 1287 1296

AAA AGA AGT ATA AAA GTA ATA AAA TAA AAT CAG AAG AGA AAA AGA AAA AGA AAA

1305 1314 1323 1332 1341 1350
GTA AAA AGA GGG GGG ACA CAC CAT AAG AAC CAA TAC CCG GGA ATT TTC GGA GCG

A 3'

FIGURE1D

1	M	A	G	M	K	I	Q	L	V	C	M	L	L	A	F	S	S	W	S	L	C	S	D	S	E	E	E	M	K	A	L	E	A	D	F	L	T	N	HPPN		
1	M	-	A	G	M	K	I	Q	L	V	C	M	I	L	L	A	F	S	S	W	S	L	C	S	D	S	E	E	E	M	K	A	L	E	T	D	L	L	T	N	GI 163424
1	M	I	-	G	M	N	L	Q	L	V	C	L	T	L	L	A	F	S	S	W	S	L	C	S	D	S	E	E	D	V	R	A	L	E	A	D	L	L	T	N	GI 92546
41	M	H	T	S	K	I	S	K	A	H	V	P	S	W	K	M	T	L	L	N	V	C	S	L	V	N	N	L	N	S	P	A	E	E	T	G	E	V	H	E	HPPN
40	M	H	T	S	K	I	S	K	A	S	V	P	S	W	K	M	S	L	L	N	V	C	S	L	I	N	N	L	N	S	Q	A	E	E	T	G	E	F	H	E	GI 163424
40	M	H	A	S	K	V	S	K	G	S	P	P	S	W	K	M	T	L	L	N	V	C	S	L	I	N	N	L	N	S	A	A	E	E	A	G	E	M	R	D	GI 92546
81	E	E	L	V	A	R	R	K	L	P	T	A	L	D	G	F	S	L	E	A	M	L	T	I	Y	Q	L	H	K	I	C	H	S	R	A	F	Q	H	W	E	HPPN
80	E	E	L	I	T	R	R	K	F	P	A	A	L	D	G	F	S	L	E	A	M	L	T	I	Y	Q	L	I	C	H	S	R	A	F	Q	H	W	E	GI 163424		
80	D	D	L	V	A	K	R	K	L	P	L	V	L	D	D	F	S	L	E	A	L	L	T	V	F	Q	L	I	C	R	S	R	A	F	Q	H	W	E	GI 92546		
121	L	I	Q	E	D	I	L	D	T	G	N	D	K	N	G	K	E	E	V	I	K	R	K	I	P	Y	I	L	K	R	Q	L	Y	E	N	K	P	R	R	P	HPPN
120	L	I	Q	E	D	I	L	D	A	G	N	D	K	N	E	K	E	E	V	I	K	R	K	I	P	Y	I	L	K	R	Q	L	Y	E	N	K	P	R	R	P	GI 163424
120	I	I	Q	E	D	I	L	D	H	G	N	E	K	T	E	K	E	E	V	I	K	R	K	I	P	Y	I	L	K	R	Q	L	Y	E	N	K	P	R	R	P	GI 92546
161	Y	I	L	K	R	D	S	Y	Y	Y																														HPPN	
160	Y	I	L	K	R	G	S	Y	Y	Y																														GI 163424	
160	Y	I	L	K	R	A	S	Y	Y	Y																														GI 92546	

FIGURE 2